U.S. ARMY PUBLIC AFFAIRS NEWS RELEASE

USC to Put 'Virtual Reality' Into Army Training

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WASHINGTON — Secretary of the Army Louis Caldera signed a $45 million contract last week with the University of Southern California, establishing an institute to develop state-of-the-art modeling and simulation technologies.

The Army wants to leverage advances in modeling and simulation technologies to improve the realism and quality of its training simulations, officials said. The Army also wants to use this same technology to improve leader-development exercises. Officials said they want to apply the modeling to test prototypes in future weapons acquisition programs.

The contract with USC was signed Aug. 18, during a ceremony in Los Angeles announcing birth of the "Institute for Creative Technologies (ICT)."

"We found a high-tech solution with this USC partnership to deliver those improvements in education and military training for the next century," Caldera said. "The USC Institute for Creative Technologies will be a joint effort of the Army, the entertainment industry and academia — an innovative team to advance dazzling new media and ultimately benefit training and education for everyone in America. This research has high-value applications to the Army, as well as the entertainment, multimedia, video game, destination theme park, and information-technology industries."

Caldera said the new technologies would help the Army make a "quantum leap forward" in preparing soldiers for diverse missions in the world of tomorrow. "This will revolutionize the way the Army trains its soldiers and how it rehearses for missions," he said. "It will enhance the realism and, thus, the value of the individual, crew-served, and networked training simulators that we use to train our soldiers. It will permit our soldiers to do en-route mission rehearsals immersed in high-fidelity images of the actual terrain to which they are about to deploy, with very real story and character content to prepare them to accomplish the mission."

Steven B. Sample, president of USC, said the ICT will develop the technologies for synthetic experiences so compelling that people will react as though they were real—a virtual reality of sensations and sights.

"The key word is 'verisimilitude' — the quality or state of appearing to be true," he explained. "Verisimilitude will apply to simulation technology in the same way that the term 'high fidelity' has applied to audio."

Also attending the Los Angeles announcement were Lon S. Hatamiya, secretary of the California Trade and Commerce Agency; City of Los Angeles Deputy Mayor Rockard Delgadillo; Jack Valenti, chief executive officer of the Motion Picture Association of America; and Richard E. Belluzzo, chairman and chief executive officer of SGI, formerly Silicon Graphics, Inc. California Governor Gray Davis spoke at the event by satellite broadcast from Sacramento.

"As a Vietnam veteran myself, I know that when it comes to accomplishing the mis-

sion, two things matter: the quality of a soldier's training, and the quality of his or her weapons. The new virtual technologies established by this project will prepare America's soldiers for the diverse and unique military operations of the future."

Researchers from the USC School of Cinema-Television, the USC School of Engineering, and USC's Annenberg School for Communication will collaborate with creative talents from the entertainment industry in the interdisciplinary research program. They will work to combine concepts of story and character, with a rapidly increasing degree of immersion in virtual reality technologies.

The Army will employ these improved simulation technologies to rehearse for missions; strategic planning through interactive battle scenarios; and combat training, recruitment, and equipment acquisition, officials said.

The institute will pursue a combination of basic and applied research. Basic research will cover six areas: simulated "immersion" by users in the technological experience; networking and databases; story; characters; setup; and direction. Applied research will be organized around a small number of long-term themes, such as simulating futuristic "Army After Next" forces.

While the Army and the entertainment industry share an interest in advancing simulation capabilities for specific purposes, these technologies offer clear potential to dramatically change training and education for all people, officials said.

"In these advanced synthetic environments that we will create, participants will be fully immersed — physically, intellectually and emotionally — in engrossing stories stocked with engaging characters who may either be simulated or manned," said Cornelius Sullivan, USC vice provost for research, who will oversee the program.

The ICT contract will be administered by the Army's Simulation, Training, and Instrumentation Command, known as STRICOM, headquartered in Orlando, Fla., and commanded by Army Brig. Gen. William Bond. The Army and USC will each appoint people to executive boards that will jointly control the ICT.

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